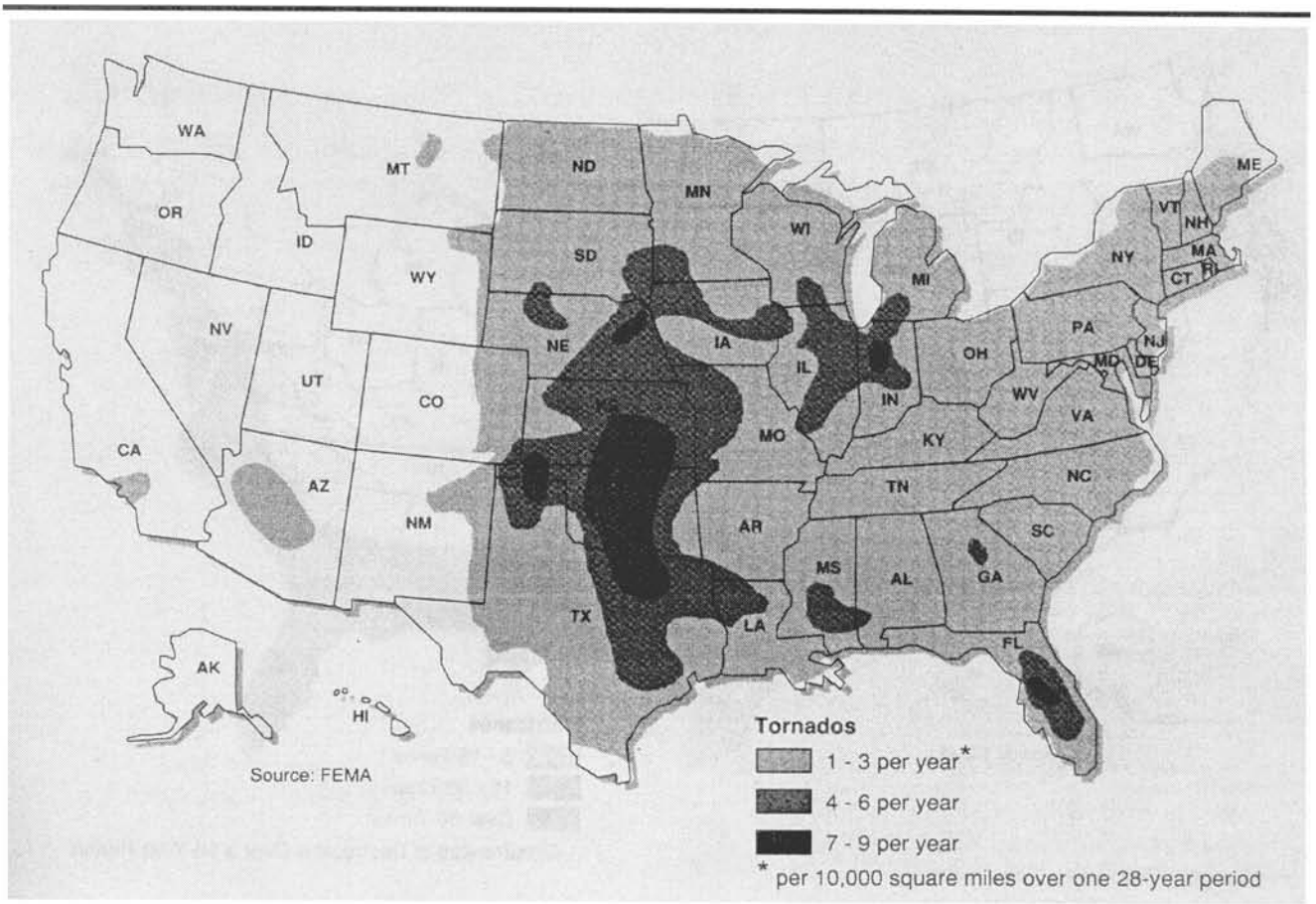


National Summary of Tornado Occurrences, 1953-1980

TORNADO

Description

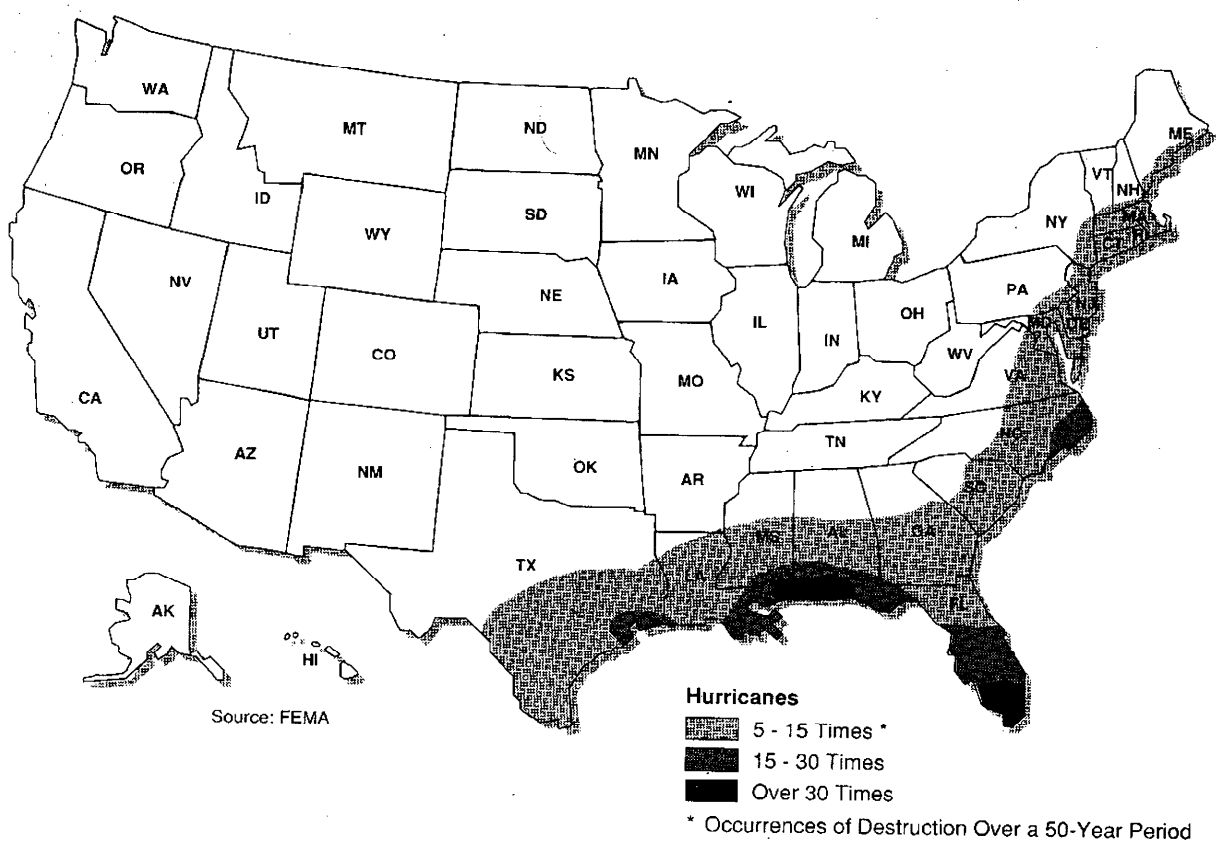
Tornados are extremely violent localized windstorms. A tornado is characterized by a funnel cloud that reaches to the ground with wind velocities inside the funnel as high as 200 miles per hour. Tornados are formed by violent thunderstorms and hurricanes. They appear as a vertical funnel cloud reaching to the ground, and creating an incredibly loud roar. Tornados almost always travel from the southwest to the northeast.

○ *Related Hazards*

Tornados are usually part of a severe thunderstorm and may be accompanied by lightning, high winds, floods, and flash floods from extremely heavy rainfall.

Geographic Considerations

Tornados can occur in every State, but are more frequent in the Midwest, Southeast, and Southwest. The states of Mississippi, Kansas, Arkansas, Oklahoma, Illinois, Indiana, Iowa, Missouri, Nebraska, Texas, Louisiana, Florida, Georgia, Alabama, and South Dakota are at greatest risk.



Tracks of Devastating Storms Caused by Hurricanes

HURRICANE

Description

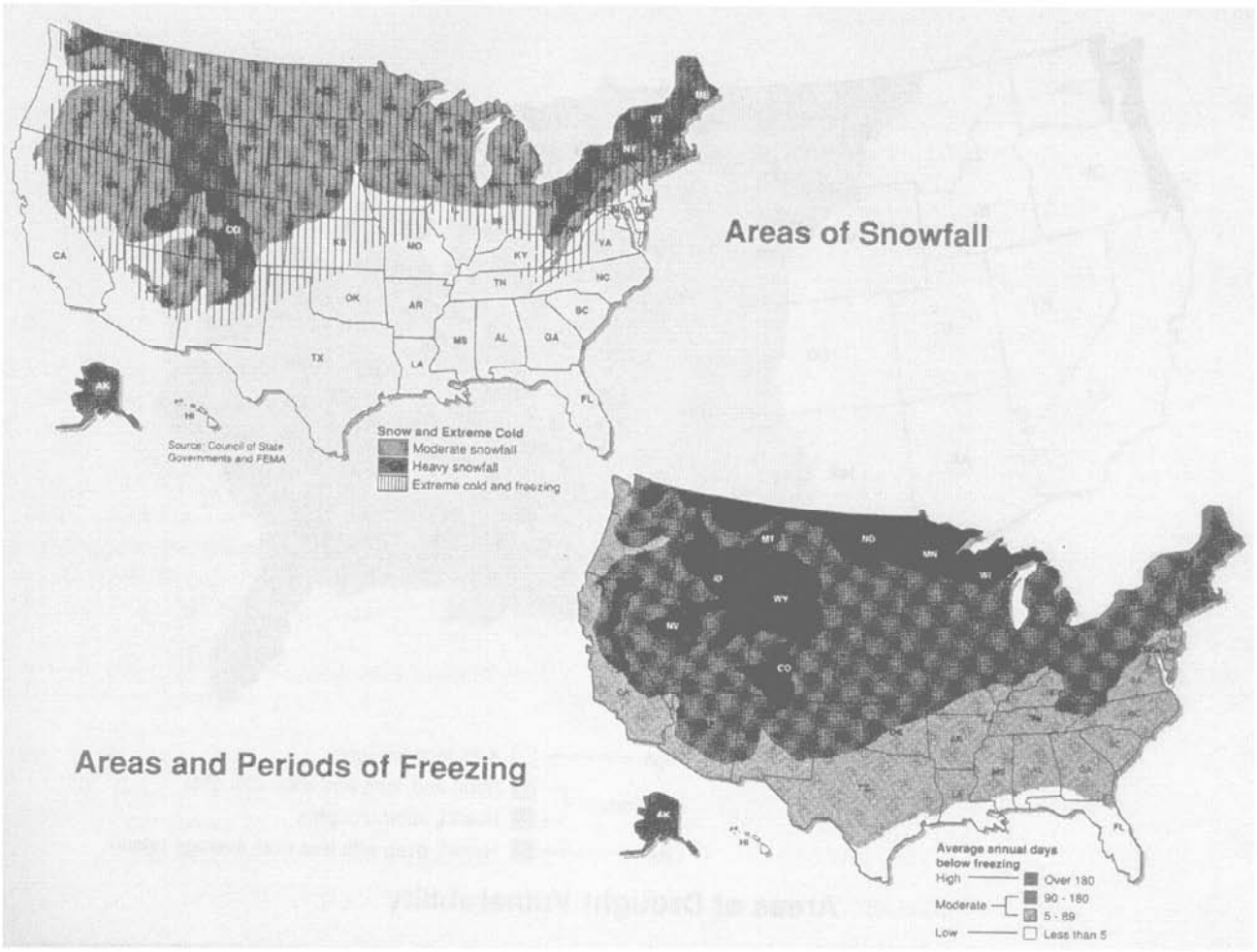
Hurricanes are severe tropical storms that spiral around a calm center known as the eye. Wind speeds range from 74 miles per hour to a high of 220 miles per hour. As hurricanes approach land, they create a storm surge along the coastline that raises water several feet above high tide levels. Hurricanes also dump heavy rains and cause flooding as they travel inland.

○ *Related Hazards*

Hurricanes may be accompanied by other severe storm hazards such as lightning, tornados, and flooding.

Geographical Considerations

Vulnerable areas in the United States include the territories in the Caribbean, the coast from Texas to Maine, and tropical areas of the western Pacific Ocean, including Hawaii.



WINTER STORMS

Description

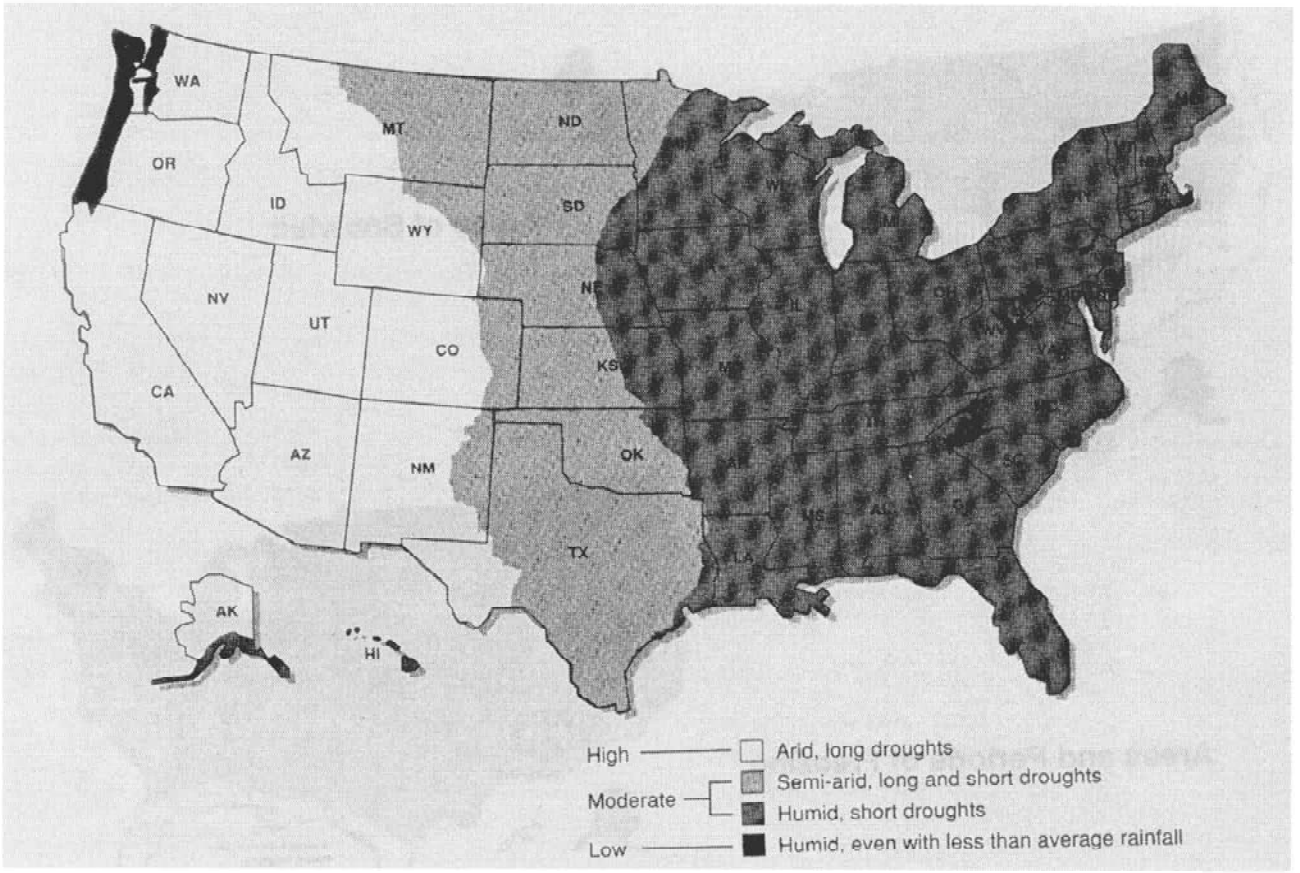
Winter storms vary in size and intensity and may affect a small part of one State or several States at once. Winter storms may be categorized as ice storms, heavy snowfall, or blizzards.

O *RelatedHazards*

Flooding can occur when large amounts of snow melt in a short period.

Geographical Considerations

Almost the entire United States, except Hawaii and the Territories, are at risk. The level of risk depends on the normal severity of local winter weather. Winter storms known as nofiheastemcause extensive coastal flooding, erosion, and property loss in the northeastern and middle Atlantic States.



Areas of Drought Vulnerability

DROUGHT AND EXTREME HEAT

Description

A *drought* is an extended period of unusually dry weather. Droughts become severe if several months pass without significant precipitation.

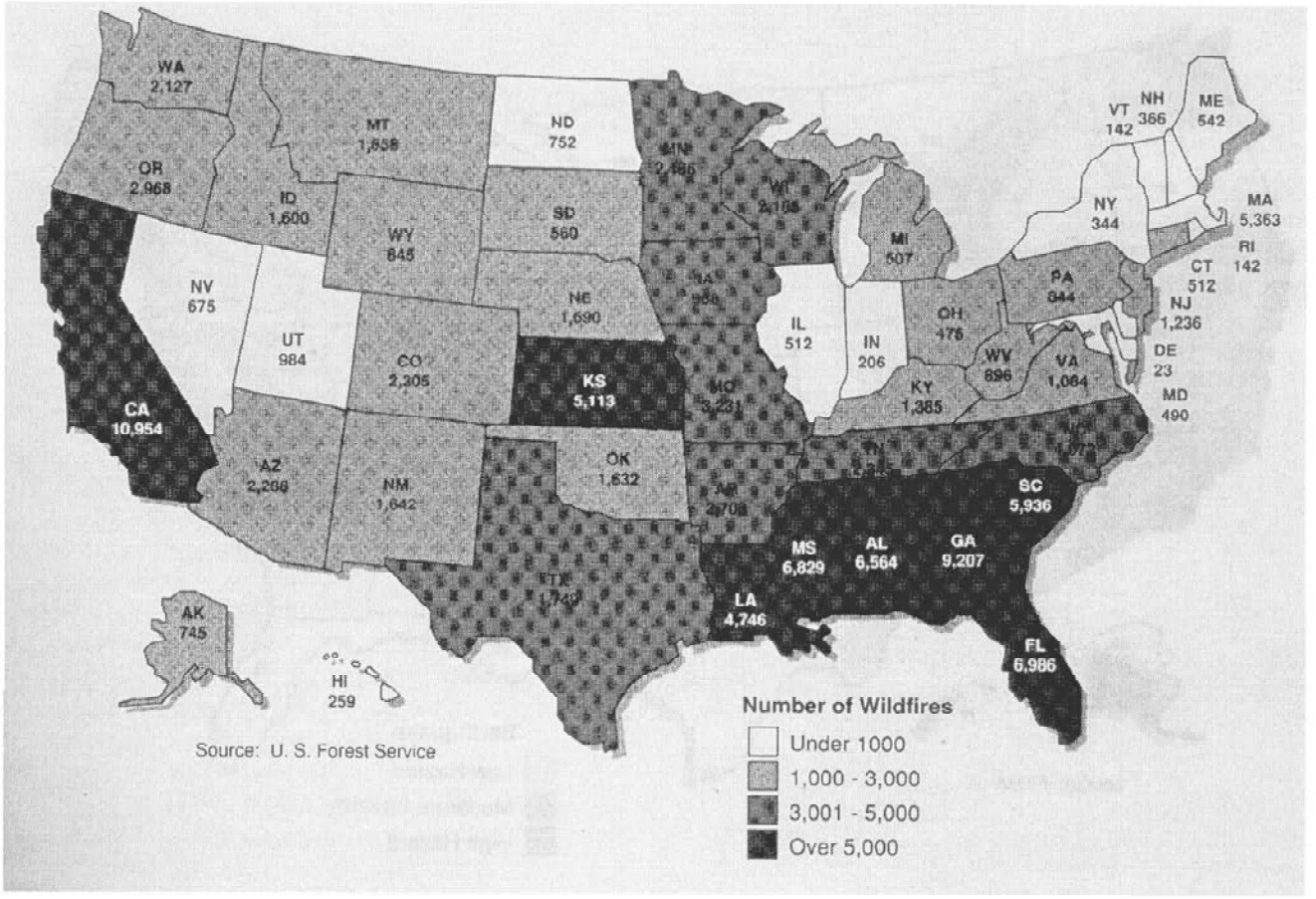
Extreme heat is defined as temperatures that are 10 or more degrees above the average high temperature, and that last for several weeks during the hottest time of the year.

Related hazards

Drought and extreme heat can cause shortages of water and food crops. Parched lands are more susceptible to wildfires during periods of drought. Droughts can actually result in later flooding: the vegetation dies without water, and as a result, even an average rain can cause flooding.

Geographical Considerations

Droughts and extreme heat are possible anywhere in the U.S. The possibility for long-term droughts is much greater in the western StatesÑexcluding the Pacific Northwest.



Wildfires on Protected Federal, State, and Private Lands, 1990

WILDFIRE

Description

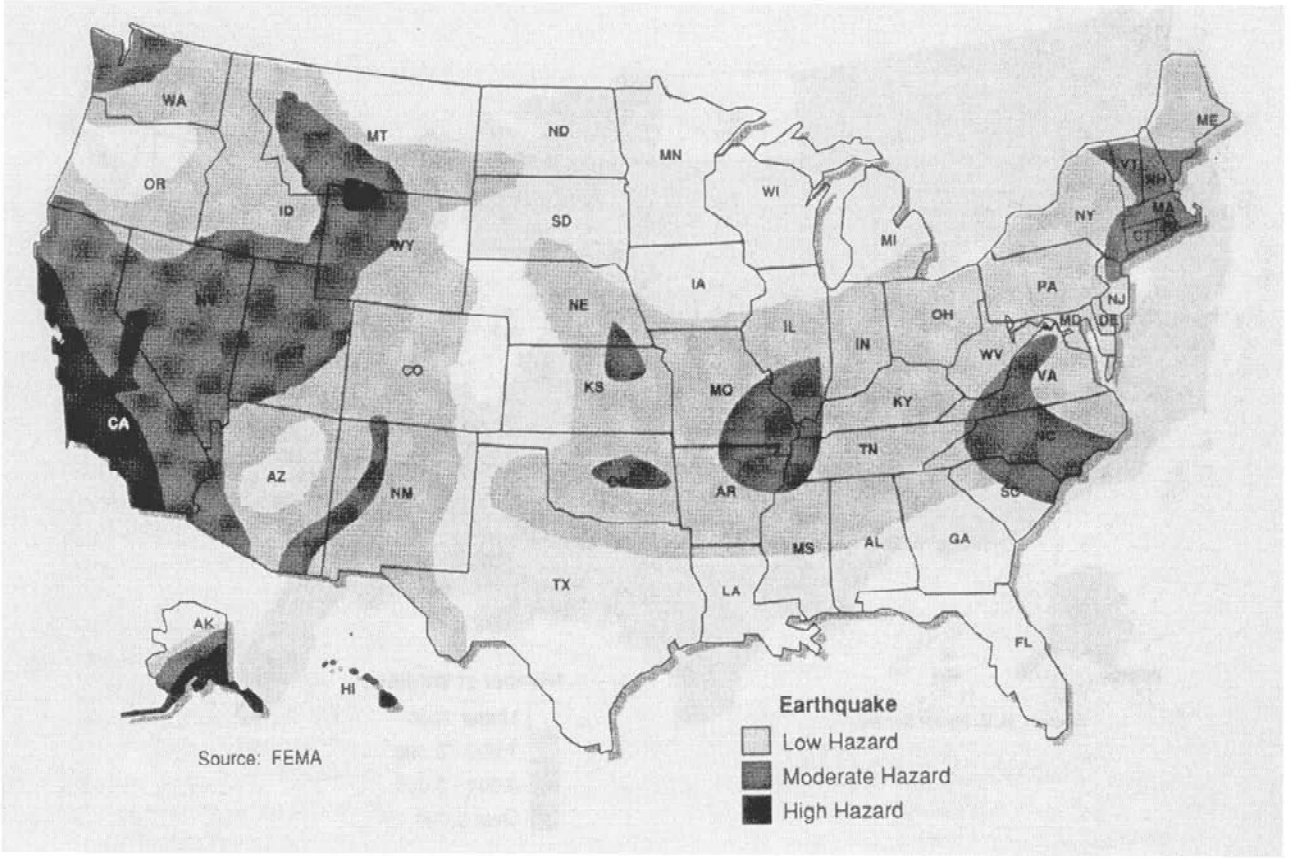
A *wildfire* is any instance of uncontrolled burning in grasslands, brush, or woodlands. Wildfires can be caused by lightning, human carelessness, or arson.

○ *Related Hazards*

Soil erosion, landslides, and flash floods are often secondary events of wildfires.

Geographic Considerations

Wildfires can occur in all wooded, brush, and grassy areasÑespecially those in Kansas, Mississippi, Louisiana, Georgia, Florida, the Carolinas, Tennessee, California, Massachusetts, and the national forests in the western States.



Earthquake Risk Areas

EARTHQUAKE

Description

An *earthquake* is a trembling of the ground that results from the sudden shifting of rock beneath the earthÕs crust.

Related Hazards

Earthquakes may cause landslides and rupture dams. They also can generate tsunamis, which may strike the coastline thousands of miles from the quake. Severe earthquakes destroy power and telephone lines, gas, sewer, or water mains which, in turn, may set off fires and/or hinder firefighting or rescue efforts. Earthquakes also may cause building and bridge collapses.

Geographical Considerations

Earthquakes occur along fault lines where massive plates of rock located beneath the earthÕs crust move against one another. Earthquakes have occurred in most areas of the United States. The most frequent earthquake events occur in States west of the Rocky Mountains, although historically the most violent earthquakes have occurred in the Eastern United States and in the Central Mississippi Valley. California is especially vulnerable because of its high seismic activity. Other highly vulnerable areas are Charleston, South Carolina, and the central United States (the New Madrid Seismic Zone), both of which were devastated by earthquakes in the last century.